



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF AIR & WASTE MANAGEMENT

AIR QUALITY MANAGEMENT
SECTION

Blue Hen Corporate Center
655 S. Bay Road, Suite 5 N
Dover, Delaware 19901

TELEPHONE: (302) 739 - 9402
FAX NO.: (302) 739 - 3106

February 21, 2012

Section Chief
Permit Program Section (**3AP11**)
United States Environmental Protection Agency
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

ATTENTION: Kathleen Cox
Section Chief, Permit Review Section

Dear Ms. Cox:

Enclosed is a final federally enforceable administrative amendment to 7 **DE Admin. Code** 1102 Permit (Pre-Construction Review) for Mountaire Farms of Delaware, Inc. having a facility at 29106 John J. Williams Highway, in Millsboro, Delaware. The amendment changes testing requirements and did not require advertising. This federally enforceable 7 **DE Admin. Code** 1102 permit (Pre-Construction Review) was issued in accordance with the requirements of 7 **DE Admin. Code** 1102 Section 11.2.10, 12.4 and 12.5. The Department will administratively amend the facility's Title V Permit (**AQM-005/00004 (Renewal 2)**) to include all applicable requirements once the equipment has been constructed and a construction to operation inspection has been conducted.

Sincerely,

Joanna L. French, P.E.
Managing Engineer
Engineering & Compliance Branch

PEF:JLF:MAS
F:\EngAndCompliance\MAS\mas12022.doc

pc: Dover (Title V) File
Paul Foster
Melanie Smith
Cathleen Kennedy- EPA Region III



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF AIR & WASTE MANAGEMENT

AIR QUALITY MANAGEMENT
SECTION

Blue Hen Corporate Center
655 S. Bay Road, Suite 5 N
Dover, Delaware 19901

TELEPHONE: (302) 739 - 9402
FAX No.: (302) 739 - 3106

February 21, 2012

Mountaire Farms of Delaware, Inc.
P.O. Box 1320
Millsboro, DE 19966

Certified Mail # 7006 0810 0001 0056 8723
Return Receipt Requested

ATTENTION: Paul Downes
President

SUBJECT: Permit: APC-2011/0080-CONSTRUCTION (Amendment 2)(FE)
Permit: APC-2011/0081-CONSTRUCTION (Amendment 2)(FE)
Permit: APC-2011/0082-CONSTRUCTION (Amendment 3)(FE)
Permit: APC-2011/0083-CONSTRUCTION (Amendment 3)(FE)
Permit: APC-2011/0084-CONSTRUCTION (Amendment 3)(FE)
Permit: APC-2011/0085-CONSTRUCTION (Amendment 3)(FE)

Dear Mr. Downes:

The Department has completed an administrative amendment to Mountaire Farms of Delaware's Resource Recovery construction permit. The amendment changes the testing requirements for the performance test based on emails from Joanna French dated December 28, 2011 and February 3, 2012. Attached is Mountaire Farms of Delaware's final federally enforceable 7 DE Admin. Code 1102 Construction Permit. Please note that this permit will expire on October 31, 2012.

As the designated Responsible Official for Mountaire Farms of Delaware, Inc., it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission unit subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular unit.

Upon completion of construction of the Resource Recovery Plant, you must submit a request to the Department to transfer the terms and conditions of **Permits: APC-2011/0080-0081-CONSTRUCTION (Amendment 2)(FE) and APC-2011/0082-0085-CONSTRUCTION (Amendment 3)** into your Title V Permit: **AQM-005/00004 (Renewal 2)** via the administrative permit amendment process. This request must contain the following:

- A description of the compliance status, a compliance schedule, and a certification of compliance for the equipment with respect to all applicable requirements in accordance with 7 DE Admin. Code 1130 Sections 5.4.8 and 5.4.9;
- A statement of the methods used to determine compliance, including a description of monitoring, record keeping, and reporting requirements and test methods; and

Permits: **APC-2011/0080-0081-CONSTRUCTION (Amendment 2)(FE)**

Permits: **APC-2011/0082-0085-CONSTRUCTION (Amendment 3)(FE)**

Mountaire Farms of Delaware, Inc.

February 21, 2012

Page 2

- A certification from you that declares, "I certify, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete."

The Department will then schedule and conduct a construction to operation inspection. If the construction to operation inspection demonstrates compliance with **Permits: APC-2011/0080-0081-CONSTRUCTION (Amendment 2)(FE)** and **APC-2011/0082-0085-CONSTRUCTION (Amendment 3)**, the Department will administratively amend your Title V Permit.

Please contact Melanie Smith at (302) 739-9402 if you have any questions or concerns regarding the attached permit.

Sincerely,



Paul E. Foster, P.E.
Program Manager
Engineering & Compliance Branch

PEF:JLF:MAS

F:\EngAndCompliance\MAS\mas12023.doc

pc: Dover (Title V) File
Melanie Smith



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF AIR & WASTE MANAGEMENT

AIR QUALITY MANAGEMENT
SECTION

Blue Hen Corporate Center
655 S. Bay Road, Suite 5 N
Dover, Delaware 19901

TELEPHONE: (302) 739 - 9402
FAX NO.: (302) 739 - 3106

February 21, 2012

Permit: **APC-2011/0080-CONSTRUCTION (Amendment 2)(FE)**
Permit: **APC-2011/0081-CONSTRUCTION (Amendment 2)(FE)**
Permit: **APC-2011/0082-CONSTRUCTION (Amendment 3)(FE)**
Permit: **APC-2011/0083-CONSTRUCTION (Amendment 3)(FE)**
Permit: **APC-2011/0084-CONSTRUCTION (Amendment 3)(FE)**
Permit: **APC-2011/0085-CONSTRUCTION (Amendment 3)(FE)**

Mountaire Farms of Delaware, Inc.
Resource Recovery Plant
Millsboro Complex
P.O. Box 1320
Millsboro, DE 19966

ATTENTION: Ms. Beth Sise
Environmental Manager

Dear Ms. Sise:

Pursuant to the 7 **DE Admin. Code** 1102 Section 2 and Section 11, approval by the Department of Natural Resources and Environmental Control is hereby granted for the construction of Emission Unit (EU) 80, EU 81, and EU 82, all Haarslev, Inc. Model AS-100 scrubbers, EU 83, Haarslev, Inc. Model AS-40 scrubber, and EU 84 and EU 85, Haarslev, Inc. Model TRO-25 thermal oxidizers, each rated 1.7 MMBTU/hr and fired on natural gas, located at the Millsboro Complex facility in Millsboro, Delaware, in accordance with the application submitted on Form Nos. AQM-1, AQM-2, AQM-3.1, AQM-4.1, AQM-4.4, AQM-5, AQM-1001, AQM-1001B, AQM-1001K, AQM-1001N, AQM-1001V, AQM-1001W, AQM-1001X, AQM-1001Y, AQM-1001BB, process flow diagram, and emission calculation sheets dated February 18, 2011 signed by Paul Downes, President, and email dated February 25, 2011 signed by Brian Lyncha, P.E., BCEE, CABE Associates, Inc., and February 28, 2011 signed by Ed Robles, CABE Associates, Inc., emails dated May 9, 2011, June 6, 2011, June 20, 2011, and June 22, 2011 signed by Brian Lyncha, CABE Associates, Inc., letter dated July 19, 2011 signed by John Wren, Director of Engineering & Environmental Services, letter dated December 2, 2011 and email dated December 23, 2011 both signed by Beth Sise, Environmental Manager, and emails dated December 28, 2011 and February 3, 2012 both signed by Joanna French, Engineering Manager.

This permit is issued subject to the following conditions all of which are federally enforceable except Condition 6.1.2 and 2.3:

1. General Provisions

- 1.1 This permit expires on October 31, 2012. If the equipment covered by this permit will not be constructed by October 31, 2012, a request to extend this construction permit must be submitted by September 17, 2012. [Reference 7 **DE Admin. Code** 1102 Section 11.10 dated 6/1/97]

Delaware's Good Nature Depends on You!

PRINTED ON
RECYCLED PAPER

- 1.2 The project shall be constructed in accordance with the information described above. If changes are necessary, revised plans must be submitted and a supplemental approval issued prior to actual construction. *[Reference 7 DE Admin. Code 1102 Section 11 dated 6/1/97]*
- 1.3 Upon presentation of identification, the Company shall authorize officials of the Department to:
 - 1.3.1 Enter upon the Company's premises where a source is located or an emissions-related activity is conducted, or where records that must be kept under the terms and conditions of this permit are located. **(This condition was taken from Permit: AQM 005/00004(R2))** *[Reference 7 DE Admin. Code 1130 Section 6.3.2.1 dated 12/11/00]*
 - 1.3.2 Have access to and copy, at reasonable times, any record(s) that must be kept under the terms and conditions of this permit. **(This condition was taken from Permit: AQM-005/00004(R2))** *[Reference 7 DE Admin. Code 1130 Section 6.3.2.2 dated 12/11/00]*
 - 1.3.3 Inspect, at reasonable times, any record(s) that must be kept under the terms and conditions of this permit. **(This condition was taken from Permit: AQM005/00004(R2))** *[Reference 7 DE Admin. Code 1130 Section 6.3.2.3 dated 12/11/00]*
 - 1.3.4 Sample or monitor, at reasonable times, any substance or parameter for the purposes of assuring compliance with this permit or any applicable requirement. **(This condition was taken from Permit: AQM005/00004(R2))** *[Reference 7 DE Admin. Code 1130 Section 6.3.2.4 dated 12/11/00]*
- 1.4 This permit may not be transferred to another location or to another piece of equipment or process. *[Reference 7 DE Admin. Code 1102 Section 7.1 dated 6/1/97]*
- 1.5 This permit may not be transferred to another person, owner, or operator unless the transfer has been approved in advance by the Department. Approval (or disapproval) of the permit transfer will be provided by the Department in writing. A request for a permit transfer shall be received by the Department at least thirty (30) days before the date of the requested permit transfer. This request shall include: *[Reference 7 DE Admin. Code 1102 Section 7.1 dated 6/1/97 and 7 Del. C., Chapter 79]*
 - 1.5.1 Signed letters from each person stating the permit transfer is agreeable to each person; and
 - 1.5.2 An Applicant Background Information Questionnaire pursuant to 7 Del. C., Chapter 79 if the person receiving the permit has not been issued any permits by the Department in the previous five (5) years.
- 1.6 The Company shall, upon completion of the construction, installation, or alteration of each emission unit, request in writing that the Department transfer the terms and conditions of this construction permit into the 7 DE Admin. Code 1130 operating permit. *[Reference 7 DE Admin. Code 1102 Section 11.5 dated 6/1/97]*
- 1.7 The request shall contain the following information, and shall contain the following language from the responsible official: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." *[Reference 7 DE Admin. Code 1102 Section 11.5.1 dated 6/1/97]*

- 1.7.1 A description of the compliance status, a complete schedule, and a certification of compliance for the equipment, facility, or air contaminant control device with respect to all applicable requirements, in accordance with **7 DE Admin. Code 1130** Section 5.4.8 and 5.4.9; and
 - 1.7.2 A statement of the methods used to determine compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods.
- 1.8 Upon satisfactory demonstration that the equipment, facility, or air contaminant control device complies with all applicable requirements and all terms and conditions of the construction permit, and not prior to the expiration of the EPA review period provided for in **7 DE Admin. Code 1102**, Section 12.5, the Department shall transfer the specified terms and conditions to the **7 DE Admin. Code 1130** permit via the administrative amendment process specified in **7 DE Admin. Code 1130**. *[Reference 7 DE Admin. Code 1102 Section 11.5.2 dated 6/1/97]*
- 1.9 The provisions of **7 DE Admin. Code 1102** Sections 2.1, 11.3, and 11.5 shall not apply to the operation of equipment or processes for the purpose of initially demonstrating satisfactory performance to the Department following construction, installation, modification, or alteration of the equipment or processes. The Company shall notify the Department sufficiently in advance of the demonstration and shall obtain the Department's prior concurrence of the operating factors, time period, and other pertinent details relating to the demonstration. *[Reference 7 DE Admin. Code 1102 Section 11.12 dated 6/1/97]*
- 1.10 The owner or operator shall not initiate construction, install, or alter any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department pursuant to **7 DE Admin. Code 1102**, and, when applicable, **7 DE Admin. Code 1125**, and receiving approval of such application from the Department; except as exempted in **7 DE Admin. Code 1102** Section 2.2. *[Reference 7 DE Admin. Code 1102 Section 2.1 dated 6/1/97]*

2. Emission Limitations

- 2.1 The Resource Recovery Plant, including thermal oxidizers EU 84 and 85 and scrubbers EU 80, 81, 82, and 83, shall not exceed the following: **(These conditions will be transferred to Permit: AQM-005/00004(R2))** *[Reference 7 DE Admin. Code 1130, Section 6.1.1 dated 12/11/00]*
 - 2.1.1 Hydrogen Sulfide (H₂S) Emissions
H₂S emissions shall not exceed 0.011 tons in any rolling twelve (12) month period.
 - 2.1.2 Ammonia (NH₃) Emissions
NH₃ emissions shall not exceed 0.08 tons in any rolling twelve (12) month period.
 - 2.1.3 Sulfur Oxide (SO_x) Emissions
SO_x emissions shall not exceed 0.003 tons in any rolling twelve (12) month period.
 - 2.1.4 Nitrogen Oxide (NO_x) Emissions
NO_x emissions shall not exceed 9.98 tons in any rolling twelve (12) month period.

2.1.5 Carbon Monoxide (CO) Emissions

CO emissions shall not exceed 0.033 tons in any rolling twelve (12) month period.

2.1.6 Volatile Organic Compound (VOC) Emissions

VOC emissions shall not exceed 0.121 tons in any rolling twelve (12) month period.

2.1.7 Particulate Matter (PM10) Emissions

PM10 emissions shall not exceed 5.97 tons in any rolling twelve (12) month period.

2.1.8 Particulate Matter (PM) Emissions

2.1.8.1 PM emissions shall not exceed 5.99 tons in any rolling twelve (12) month period.

2.1.8.2 For EU 84 and 85 (thermal oxidizers), the Company shall not cause or allow the emission of particulate matter in excess of 0.3 lb/MMBTU heat input, maximum two (2) hour average. **(This condition will be transferred to Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1104, Section 2.0 dated 2/1/81]

2.1.8.3 Particulate emissions shall not exceed 0.2 grains of particulate matter per standard cubic foot of exhaust air from thermal oxidizers EU 84 and 85 and scrubbers EU 80, 81, 82, and 83. **(This condition will be transferred to Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1105 Section 2.0 dated 2/1/81]

2.2 No person shall cause or allow the emission of visible air contaminants and/or smoke from a stationary or mobile source, the shade or appearance of which is greater than twenty percent (20%) opacity for an aggregate of more than three (3) minutes in any one (1) hour or more than fifteen (15) minutes in any twenty-four (24) hour period. **(This condition was taken from Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1114 Section 2.1 dated 7/17/84]

2.3 Odors from this source shall not be detectable beyond the plant property line in sufficient quantities such as to cause a condition of air pollution. **(This condition was taken from Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1119 Section 2.0 dated 2/1/81]

3. Operational Limitations

3.1 Natural gas consumption shall not exceed 5.3 MMSCF in any rolling twelve month period for each thermal oxidizer. **(This condition will be transferred to Permit: AQM005/00004(R2))** [Reference 7 DE Admin. Code 1130, Section 6.1.1 dated 12/11/00]

3.2 Natural gas consumption shall not exceed 10.5 MMSCF in any rolling twelve month period for both thermal oxidizers. **(This condition will be transferred to Permit: AQM005/00004(R2))** [Reference 7 DE Admin. Code 1130, Section 6.1.1 dated 12/11/00]

3.3 Fan amperage for each of the scrubbers EU 80 (Scrubber 610), EU 81 (Scrubber 620), and EU 82 (Scrubber 630) shall not fall below 165 amps. **(This condition will be transferred to Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1130, Section 6.1.1 dated 12/11/00]

Permits: APC-2011/0080-0081-CONSTRUCTION (Amendment 2)(FE)

Permits: APC-2011/0082-0085-CONSTRUCTION (Amendment 3)(FE)

Mountaire Farms of Delaware, Inc.

Millsboro Complex

Resource Recovery Plant

February 21, 2012

Page 5

- 3.4 Fan amperage for scrubber EU 83 (Scrubber 640) shall not fall below 75 amps. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1130, Section 6.1.1 dated 12/11/00]
- 3.5 The temperature in the combustion chamber of thermal oxidizers EU 84 and EU 85 shall be at least 1202°F. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1130, Section 6.1.1 dated 12/11/00]
- 3.6 The thermal oxidizers EU 84 and EU 85 shall be fired by natural gas only. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1130, Section 6.1.1 dated 12/11/00]
- 3.7 Raw material usage shall not exceed 3.5 tons per hour blood, 7 tons per hour feathers, and 25 tons per hour offal and carcasses. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1130, Section 6.1.1 dated 12/11/00]
- 3.8 No person shall cause or allow visible particulate emissions of any material being transported by a motor vehicle. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1106, Section 4.0 dated 2/1/81]
- 3.9 No person shall cause or allow stockpiling or other storage of material or transport to or from a storage facility in such a manner as may cause a condition of air pollution. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1106, Section 6.0 dated 2/1/81]
- 3.10 At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the facility, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determinations of whether acceptable operating procedures are being used will be based on information available to the Department, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1101 Section 3 dated 2/1/81 and 7 DE Admin. Code 1102 Section 11.6 dated 6/1/97]
- 3.11 All structural and mechanical components of the equipment covered by this permit and in use shall be maintained in proper operating condition. (This condition was taken from Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1101 Section 3 dated 2/1/81 and 7 DE Admin. Code 1102 Section 11.6 dated 6/1/97]
- 3.12 The operational limitations of Conditions 3.1 and 3.2 are voluntary restrictions taken by the Company to limit emissions of NOx to below the five (5) ton per year applicability threshold of 7 DE Admin. Code 1125, Section 4.0, *Minor New Source Review*. The Company shall meet the control technology requirements of *Minor New Source Review*, 7 DE Admin. Code 1125, Section 4.0, if the Company requests an increase in fuel consumption that results in a NOx Potential to Emit above five tons per year. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1125 Section 4.0 dated 8/11/05]
- 3.13 The facility shall comply with the following conditions no later than January 5, 2012. (These conditions will be transferred to Permit: AQM005/00004(R2)) [Reference 40 CFR 63 Subpart DDDDDDD dated 1/5/10]

- 3.13.1 In all areas where materials containing manganese are stored, used, or handled, the owner or operator shall comply with the management practices below:
 - 3.13.1.1 The owner or operator shall use an industrial vacuum system or manual sweeping to reduce the amount of dust.
 - 3.13.1.2 At least once per month, the owner or operator shall remove dust from walls, ledges, and equipment using low pressure air or by other means, and then sweep or vacuum the area.
 - 3.13.1.3 The owner or operator shall keep doors shut except during normal entering and exiting.
 - 3.13.1.4 The owner or operator shall maintain and operate all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust.
- 3.13.2 The owner or operator shall store any raw materials containing manganese in closed containers.
- 3.13.3 The mixer where materials containing manganese are added shall be covered at all times when mixing is occurring, except when the materials are being added to the mixer. Materials containing manganese shall be added to the mixer in a manner that minimizes emissions.
- 3.13.4 For the bulk loading process where prepared feed products containing manganese are loaded into trucks, the facility shall use a device at the loadout end of each bulk loader to lessen fugitive emissions by reducing the distance between the loading arm and the truck.
- 3.13.5 Emissions shall be routed to a cyclone designed to reduce emissions of PM by 95% or greater.
 - 3.13.5.1 The facility shall demonstrate that the cyclone is designed to reduce emissions of PM by 95% or greater using manufacturer specifications.
 - 3.13.5.2 The facility shall establish an inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone as provided by the manufacturer.
 - 3.13.5.3 The facility shall maintain and operate the cyclones in accordance with manufacturer specifications.

4. Testing and Monitoring Requirements

- 4.1 Within ninety (90) days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup of such facility, the owner

or operator shall conduct performance test(s) and furnish the Department with a written report of the results of such performance test(s) in accordance with the following general provisions:

- 4.1.1 One (1) original and two (2) copies of the test protocol shall be submitted a minimum of forty-five (45) days in advance of the tentative test date to the address in Condition 6.3. The tests shall be conducted in accordance with the State of Delaware and Federal Requirements. **(This condition was taken from Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1117 Section 2.2 dated 7/17/84]
- 4.1.2 The test protocol shall be approved by the Department prior to initiating any testing. Upon approval of the test protocol, the Department will notify the owner or operator and the Company shall schedule a test date with the Air Surveillance and Engineering & Compliance Branches. The Department must observe the test for the results to be considered for acceptance. [Reference 7 DE Admin. Code 1102 Section 11.7 dated 6/1/97]
- 4.1.3 The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original and two (2) copies of the test report shall be submitted to the addresses below: [Reference 7 DE Admin. Code 1112 dated 11/24/93]

Original and One (1) Copy to:
Engineering & Compliance Branch
Attn: Assigned Engineer/Scientist
Blue Hen Corporate Center
655 S. Bay Road, Suite 5 N
Dover, DE 19901

One (1) Copy to:
Air Surveillance Branch
Attn: Eng./Observer
715 Grantham Lane
New Castle, DE 19720

- 4.1.4 The final report of the results must meet the following requirements to be considered valid:
- 4.1.4.1 The full report shall include the emissions test report (including raw data from the test) as well as a summary of the results and statement of compliance or non-compliance with permit conditions; [Reference 7 DE Admin. Code 1117 Section 2.6 dated 7/17/84]
- 4.1.4.2 Summary of Results and Statement of Compliance or Non-Compliance
The owner or operator shall supplement the report from the emissions testing firm with a summary of results that includes the following information:
- 4.1.4.2.1 A statement that the owner or operator has reviewed the report from the emissions testing firm and agrees with the findings. [Reference 7 DE Admin. Code 1117 Section 2.6 dated 7/17/84]
- 4.1.4.2.2 Permit number(s) and condition(s) which are the basis for the compliance evaluation. [Reference 7 DE Admin. Code 1117 Section 2.6 dated 7/17/84]

- 4.1.4.2.3 Summary of results with respect to each permit condition.
[Reference 7 DE Admin. Code 1117 Section 2.6 dated 7/17/84]
- 4.1.4.2.4 Statement of compliance or non-compliance with each permit condition. *[Reference 7 DE Admin. Code 1117 Section 2.6 dated 7/17/84]*
- 4.1.4.3 The Test Report shall be certified by a Responsible Official as to truth, accuracy, and completeness as required by Condition 6.4 of this permit.
[Reference 7 DE Admin. Code 1130 Section 5.6 dated 11/15/93 and 6.3.1 dated 12/11/00]
- 4.1.5 The results must demonstrate to the Department's satisfaction that the emission unit is operating in compliance with the applicable regulations and conditions of this permit; if the final report of the test results shows non-compliance the owner or operator shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action. *[Reference 7 DE Admin. Code 1102 Section 11.3 dated 6/11/06]*
- 4.2 In accordance with Condition 4.1, the owner or operator shall, at the Company's expense, sample the emissions of the two regenerative thermal oxidizers and scrubber EU 83, maintain records, and submit reports to the Department on the result of such sampling. **(This condition was taken from Permit: AQM-005/00004(R2))** *[Reference 7 DE Admin. Code 1117 Section 2.2 dated 7/17/84]*
 - 4.2.1 The Company shall test for NO_x, SO₂, THC, NH₃, and CO emissions after each of the two thermal oxidizers.
 - 4.2.2 The Company shall test for THC, NH₃, and PM emissions after scrubber EU 83.
 - 4.2.3 An RTO combustion chamber operating temperature will be established at the performance test.
- 4.3 For thermal oxidizers EU 84 and EU 85 and scrubbers EU 80, EU 81, EU 82, and EU 83: The Company shall monitor the presence or absence of visible emissions during thermal oxidizer/scrubber start-up and operation, when the facility is operating during daylight hours and record observations in a log using the following procedure: **(These conditions will be transferred to Permit: AQM-005/00004(R2))** *[Reference 7 DE Admin. Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]*
 - 4.3.1 "Survey of emission point for the presence or absence of visible emissions" shall be defined as a minimum period of five (5) consecutive minutes.
 - 4.3.2 The detection of the presence or absence of visible emissions shall be in accordance with the procedures of EPA Reference Method 22 (40 CFR 60, Appendix A) paragraphs 4 and 5 which follow.
 - 4.3.3 This procedure does not require that the opacity of the emissions be determined. Since this procedure requires only the determination of whether visible emissions occur and does not require the determination of opacity levels, observer certification according to the procedures of EPA Reference Method 9 (40 CFR 60, Appendix A) is not required. However, it is necessary that the observer is educated on the general procedures for determining the presence of visible

emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor).

- 4.3.4 If visible emissions are observed for three (3) consecutive minutes, the visible emission survey shall be stopped and corrective action shall be taken. After the corrective action has been completed, the visible emissions survey shall be resumed.
- 4.3.5 If visible emissions are observed again, an EPA Reference Method 9 visible emissions observation shall be conducted. If visible emissions exceed those limits identified in 7 **DE Admin. Code** 1114, the thermal oxidizer/scrubber shall be taken off-line and corrective action shall be taken. If visible emissions do not exceed those limits identified in 7 **DE Admin. Code** 1114, but are still present and not part of normal operations, the survey for the presence or absence of visible emissions and further corrective action shall continue until the problem is corrected or the emission unit is taken off-line.
- 4.4 The fan amperage for scrubbers EU 80, EU 81, EU 82, and EU 83 shall be monitored twice each day. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 **DE Admin. Code** 1130 Section 6.1.3.1 dated 12/11/00]
- 4.5 The ORP of the scrubbing solution for EU 80, EU 81, EU 82, and EU 83 shall be monitored continuously. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 **DE Admin. Code** 1130 Section 6.1.3.1 dated 12/11/00]
- 4.6 The temperature in the combustion chamber of thermal oxidizers EU 84 and EU 85 shall be monitored continuously. (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 **DE Admin. Code** 1130 Section 6.1.3.1 dated 12/11/00]
- 4.7 The owner or operator shall conduct a daily odor survey at the perimeter of the facility on days the Resource Recovery Plant is operational according to the following procedure: (This condition will be transferred to Permit: AQM005/00004(R2)) [Reference 7 **DE Admin. Code** 1130 Section 6.1.3.1 dated 12/11/00]
 - 4.7.1 The daily surveys shall be conducted five days a week (Monday- Friday).
 - 4.7.2 The Company shall include off-day monitoring if there are any verified odor complaints on any off-day in any subsequent quarter.
 - 4.7.3 If an odor sufficient to cause or create a condition of air pollution is detected, the Company shall take action until an odor survey results in no detection of an odor from the Resource Recovery Plant.
 - 4.7.4 The survey shall be conducted on a weekly basis if no odors from the Resource Recovery Plant are detected in any consecutive seven days.
- 4.8 The facility shall comply with the following conditions no later than January 5, 2012. (These conditions will be transferred to Permit: AQM005/00004(R2)) [Reference 40 CFR 63 Subpart DDDDDDD dated 1/5/10]

- 4.8.1 The device at the loadout end of the bulk loader shall be inspected monthly to ensure it is in proper working condition.
- 4.8.2 The owner or operator shall inspect the pellet cooler cyclones quarterly for corrosion, erosion, or any other damage that could result in air in-leakage.
- 4.8.3 The owner or operator shall monitor inlet flow rate, inlet velocity, pressure drop, or fan amperage at least once per day when the pelleting process is in operation.

5. Record Keeping Requirements

- 5.1 The Company shall maintain, at a minimum, all of the information required by this permit for a minimum of five (5) years from such information's date of record. **(This condition was modified from Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1130 Section 6.1.3.2.2 dated 12/11/00]
- 5.2 Records of all test data shall be maintained. This data includes, but may not be limited to:
 - 5.2.1 The date, place and time of sampling measurements;
 - 5.2.2 The date(s) analyses were performed;
 - 5.2.3 The Company or entity that performed the analyses;
 - 5.2.4 The analytical techniques or methods used;
 - 5.2.5 The results of such analyses; and
 - 5.2.6 The operating conditions existing at the time of sampling or measurement.
[Reference 7 DE Admin. Code 1130 Section 6.1.3.2 dated 12/11/00]
- 5.3 The Company shall record the following in an initialed logbook daily: **(These conditions will be transferred to Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1130 Section 6.1.3.2 dated 12/11/00]
 - 5.3.1 The fan amperage recorded twice each day for scrubbers EU 80, EU 81, EU 82, and EU 83.
 - 5.3.2 The type of fuel combusted in the thermal oxidizers EU 84 and EU 85.
 - 5.3.3 Tons of raw blood processed.
 - 5.3.4 Tons of feathers processed.
 - 5.3.5 Tons of offal and carcasses processed.
 - 5.3.6 Hours of resource recovery operation.
 - 5.3.7 Methods of compliance with Conditions 3.7 and 3.8.

- 5.4 The Company shall record the following for each month: **(These conditions will be transferred to Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1130 Section 6.1.3.2 dated 12/11/00]
 - 5.4.1 The fuel usage for the twelve (12) month period immediately preceding the date of record in MMSCF for each thermal oxidizer EU 84 and EU 85.
 - 5.4.2 The total fuel usage for the twelve (12) month period immediately preceding the date of record in MMSCF for both thermal oxidizers EU 84 and EU 85.
- 5.5 The Company shall maintain records of the following: **(These conditions will be transferred to Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1130 Section 6.1.3.2 dated 12/11/00]
 - 5.5.1 All routine and non-routine maintenance.
 - 5.5.2 ORP of the scrubbing solution for EU 80, EU 81, EU 82, and EU 83.
 - 5.5.3 The temperature in the combustion chamber of thermal oxidizers EU 84 and EU 85.
 - 5.5.4 Calculations to show compliance with Conditions 2.1.8.2 and 2.1.8.3.
 - 5.5.5 The odor survey log shall be initialed for each day the survey is conducted and includes the following:
 - 5.5.5.1 Presence or absence of odor.
 - 5.5.5.2 Wind direction.
 - 5.5.5.3 Location monitored.
 - 5.5.5.4 Actions taken in response to odors detected.
- 5.6 The facility shall comply with the following conditions no later than January 5, 2012. **(These conditions will be transferred to Permit: AQM-005/00004(R2))** [Reference 40 CFR 63 Subpart DDDDDDD dated 1/5/10]
 - 5.6.1 The Company shall keep a copy of the Initial Notification and Notification of Compliance Status and supporting documentation.
 - 5.6.2 The Company shall keep a copy of each Annual Compliance Certification.
 - 5.6.3 For each loadout device, the Company shall keep records of all inspections including the information listed below:
 - 5.6.3.1 The date, place, and time of each inspection.
 - 5.6.3.2 Person performing the inspection.
 - 5.6.3.3 Results of the inspection, including the date, time, and duration of the corrective action period from the time the inspection indicated a problem

to the time of the indication that the device was replaced or restored to operation.

5.6.4 For each cyclone, the Company shall keep records of the following:

5.6.4.1 Information from the manufacturer regarding the design efficiency of the cyclone.

5.6.4.2 The inlet flow rate, inlet velocity, pressure drop, or fan amperage range that represents proper operation of the cyclone.

5.6.4.3 The operation and maintenance procedures to ensure proper operation of the cyclone.

5.6.4.4 Records of all quarterly inspections including the information listed below:

5.6.4.4.1 The date, place, and time of each inspection.

5.6.4.4.2 Person performing the inspection.

5.6.4.4.3 Results of the inspection, including the date, time, and duration of the corrective action period from the time the inspection indicated a problem to the time of the indication that the cyclone was restored to proper operation.

5.6.4.5 Records of the daily inlet flow rate, inlet velocity, pressure drop, or fan amperage measurements, along with the date, time and duration of the correction action period from the time the monitoring indicated a problem to the time of the indication that the cyclone was restored to proper operation.

6. **Reporting Requirements**

6.1 Emission in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department:

6.1.1 Immediately upon discovery and after activating the appropriate site emergency plan to the Department's 24-hour complaint line (1-800-662-8802) any deviation that poses an imminent and substantial danger to public health, safety, or the environment. **(This condition was taken from Permit: AQM005/00004(R2))** [Reference 7 **DE Admin. Code 1130 Section 6.1.3.3.3.2 dated 12/11/00**]

6.1.2 Immediately upon discovery by calling the Environmental Emergency Notification and Compliant number, (800) 662-8802. (State Enforceable Only) **(This condition was taken from Permit: AQM-005/00004(R2))** [Reference 7 **DE Admin. Code 1130 Section 6.1.3.3.3.3 dated 12/11/00**]

6.2 Discharges to the atmosphere in excess of any quantity specified 7 **DE Admin. Code 1203 "Reporting of a Discharge of a Pollutant or an Air Contaminant"** shall be reported, immediately upon discovery and after activating the appropriate site emergency plan,

either in person or to the Department's 24-hour compliant line (1-800-662-8802). Discharges in compliance with this permit and excess emissions previously reported under Condition 6.1 of this permit are exempt from this reporting requirement. **(This condition was modified from Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1130 Section 6.1.3.3.3.5 dated 12/11/00 and 7 Del. C. Chapter 60, Section 6028]

- 6.3 In addition to complying with Condition 6.1 and 6.2 of this permit, any reporting required by 7 DE Admin. Code 1203 "**Reporting of a Discharge of a Pollutant or an Air Contaminant**" and any other reporting requirements mandated by the State of Delaware, the owner or operator shall for each occurrence of excess emissions, within thirty (30) calendar days of becoming aware of such occurrence, supply the Department in writing with the following information:
- 6.3.1 The name and location of the facility;
 - 6.3.2 The subject source(s) that caused the excess emissions;
 - 6.3.3 The time and date of first observation of the excess emissions;
 - 6.3.4 The cause and expected duration of the excess emissions;
 - 6.3.5 For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
 - 6.3.6 The proposed corrective actions and schedule to correct the conditions causing the excess emissions. **(This condition was modified from and will be transferred to Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1112 Section 7.3 paragraphs 1, 2, 3, 4, and 5 dated 11/24/93]
- 6.4 The facility shall comply with the following conditions no later than January 5, 2012. **(These conditions will be transferred to Permit: AQM-005/00004(R2))** [Reference 40 CFR 63 Subpart DDDDDDD dated 1/5/10]
- 6.4.1 The Company shall submit a Notification of Compliance Status on or before May 4, 2012 that includes the following information:
 - 6.4.1.1 The Company's name and address.
 - 6.4.1.2 A statement by the responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63 Subpart DDDDDDD.
 - 6.4.1.3 The inlet flow rate, inlet velocity, pressure drop, or fan amperage range that constitutes proper operation of the cyclones.
 - 6.4.2 The Company shall prepare an Annual Compliance Certification report by March 1,

2013, and every year thereafter, for the previous calendar year. The report shall contain the following information:

6.4.2.1 The Company's name and address.

6.4.2.2 A statement by the responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63 Subpart DDDDDDD.

6.4.2.3 If the source is not in compliance, include a description of deviations from the applicable requirements, the time periods during which the deviations occurred, and the corrective actions taken.

6.4.2.4 Identification of all instances when the daily inlet flow rate, inlet velocity, pressure drop, or fan amperage is outside range that constitutes proper operation of the cyclone submitted as part of your Notification of Compliance Status. In these instances, include the time periods when this occurred and the corrective actions taken.

6.4.2.5 Notification if your average daily feed production level for the previous year was 50 tons per day or less and that the Company is no longer complying with the operating requirements of 40 CFR 63 Subpart DDDDDDD.

6.4.3 The Annual Compliance Certification shall be submitted to the Department by March 1, 2013, and every year thereafter, for each year that either condition below applies:

6.4.3.1 During the previous calendar year, the facility experienced a deviation of one of the management practices of Condition 3.12.1, or failed to perform inspections of the loadout dust suppression device described in Condition 4.8.1, or failed to perform inspections of the cyclones described in Condition 4.8.2.

6.4.3.2 During the previous calendar year, the facility experienced a deviation of proper operation of the cyclones as described in Condition 6.4.2.4.

6.4.4 If the Company no longer uses materials that contain manganese, the Company shall submit a Notification which includes the following:

6.4.4.1 The Company's name and address.

6.4.4.2 A statement by a responsible official indicating that the facility no longer uses materials that contain manganese. This statement should include an effective date for the termination of use of materials that contain manganese, and the responsible official's name, title, phone number, e-mail address and signature.

- 6.5 Each document submitted to the Department/EPA pursuant to this permit shall be certified by a Responsible Official as to truth, accuracy, and completeness. Such certification shall be signed by a Responsible Official and shall contain the language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." (This condition was taken from Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1130 Section 5.6 dated 11/15/93 and 6.3.1 dated 12/11/00]

- 6.6 Each document submitted to the Department/EPA pursuant to this permit shall be sent to the following addresses: (This condition was taken from Permit: AQM005/00004(R2))

State of Delaware – DNREC Division of Air Quality Blue Hen Corporate Center 655 S. Bay Road, Suite 5 N Dover, DE 19901 ATTN: Division Director	United States Environmental Protection Agency Associate Director of Enforcement (3AP12) 1650 Arch Street Philadelphia, PA 19103
No. of Originals: <u>1</u> & No. of Copies: <u>1</u>	No. of Copies: <u>1</u>

7. Compliance Certification

- 7.1 Compliance with the terms and conditions of this permit shall be certified to the Department not later than the first day of February of each year unless the terms and conditions require Compliance Certifications to be submitted more frequently. Such certifications shall cover the previous calendar year and shall be submitted on Form AQM-1001BB. The Compliance Certification shall include the following information: (This condition was taken from Permit: AQM-005/00004(R2)) [Reference 7 DE Admin. Code 1130 Section 6.3.5.3.1 dated 12/11/00]
- 7.1.1 The identification of each term or condition of the permit that is the basis of the certification. (This condition was taken from Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1130 Section 6.3.5.3.1 dated 12/11/00]
- 7.1.2 The Company's current compliance status, as shown by monitoring data and other information reasonably available to the Company. (This condition was taken from Permit: AQM-005/00004(R2)) [Reference 7 DE Admin. Code 1130 Section 6.3.5.3.2 dated 12/11/00]
- 7.1.3 Such certification shall indicate whether compliance was continuous or intermittent during the covered period. (This condition was taken from Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1130 Section 6.3.5.3.3 dated 12/11/00]
- 7.1.4 The method(s) used for determining the compliance status of the Company, currently and over the reporting period as required by the monitoring, record keeping, and reporting required under Conditions 4, 5, and 6. (This condition was modified from Permit: AQM-005/00004(R2)) [Reference 7 DE Admin. Code 1130 Section 6.3.5.3.4 dated 12/11/00]
- 7.1.5 Such other facts that the Department may require to determine the compliance status of the source. (This condition was taken from Permit: AQM005/00004(R2)) [Reference 7 DE Admin. Code 1130 Section 6.3.5.3.5 dated 12/11/00]

- 7.2 Each compliance certification shall be submitted to the Department and EPA and shall be certified in accordance with Condition 6.4 of this permit. **(This condition was modified from Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1130 Section 6.3.5.4 dated 12/11/00]
- 7.3 Any additional information possessed by the Company that demonstrates noncompliance with any applicable requirement must also be used as the basis for Compliance Certifications. **(This condition was taken from Permit: AQM005/00004(R2))** [Reference 62 FR 8314 dated 2/24/97]

8. **Administrative Conditions**

- 8.1 This permit supersedes **Permits: APC-2011/0080-CONSTRUCTION (Amendment 1)(FE), APC-2011/0081-CONSTRUCTION (Amendment 1)(FE), APC-2011/0082-CONSTRUCTION (Amendment 2)(FE), APC-2011/0083-CONSTRUCTION (Amendment 2)(FE), APC-2011/0084-CONSTRUCTION (Amendment 2)(FE), and APC-2011/0085-CONSTRUCTION (Amendment 2)(FE)** dated January 18, 2012.
- 8.2 The Company shall have available at the facility at all times a copy of this permit and shall provide a copy of this permit to the Department upon request. **(This condition was taken from Permit: AQM-005/00004(R2))** [Reference 7 DE Admin. Code 1102 Section 8.1 dated 6/1/97]
- 8.3 Failure to comply with the provisions of this permit may be grounds for suspension or revocation. [Reference 7 DE Admin. Code 1102 Section 6 dated 6/1/97]

Sincerely,



Paul E. Foster, P.E.
Program Manager
Engineering & Compliance Branch

PEF:JLF:MAS
F:\EngAndCompliance\MAS\mas12021.doc

pc: Dover (Title V) File
Melanie Smith